

REMARKS

With entry of the foregoing amendments, claims 1, 5-10, and 12-24 are now pending in the application. Specifically, claims 1, 10, 17 and 20 have been amended. Claims 3 and 4 are now canceled with the features of those claims now incorporated into amended claim 1. New claims 23 and 24 have been added. The Applicants respectfully request reconsideration in view of the foregoing amendments.

35 U.S.C. §103 rejection

The Examiner rejected claims 1, 3-10, and 12-16 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,446,261 to Rosser in view of U.S. Patent No. 6,434,747 to Khoo et al and in further view of U.S. Patent No. 5,848,397 to Marsh et al.

The present invention is a network system that uses a system manager component to control the scheduling of content download to targeted client devices in a bandwidth efficient manner and to control the scheduling of content activation at the targeted devices.

Specifically, individual scheduling messages are generated and delivered to targeted client devices having user profiles that match a group profile for the targeted content. Each of the scheduling messages contains data identifying the content to be downloaded to a targeted device as well as data that schedules activation of the content at a time subsequent to the content download in a manner free of user intervention.

A system manager component schedules content download and activation by initiating delivery of the scheduling messages in advance of content activation, such as at a time when bandwidth utilization is expected to be minimal. In response to receiving a scheduling message, a targeted client device establishes a connection with the server system to download the targeted content identified in the scheduling message and then activates the downloaded content at a subsequent time according to the data in the scheduling message. Similar features are now recited in claims 1 and 10.

In the present office action, the Examiner acknowledges that Rosser and Khoo do not schedule content downloads. However, the Examiner states that Marsh teaches a download

scheduler that determines when advertisements are sent to targeted users and sends scheduled ad content to the client upon any connection between the client and the server.

Marsh does not teach or suggest a server component that schedules targeted content downloads by initiating delivery of scheduling messages that cause the targeted network devices to download and activate the content according to the scheduling messages. For purposes of clarity, claims 1 and 10 are now amended to clarify that in response to receiving a scheduling message, each of the targeted devices establishes a connection with the server system to download the targeted content.

Specifically, claims 1 and 10 similarly recite a system manager that initiates delivery of individual scheduling messages in advance of content activation to targeted network devices. At each of the targeted devices, a system agent receives one of the scheduling messages and, in response, automatically directs a bulk data transfer agent to establish a connection to a bulk data transfer manager of the server system. After establishing the connection, the bulk data transfer agent requests the targeted content identified in the scheduling message. The bulk data transfer manager then downloads the requested content from a content store to the bulk data transfer agent. Subsequently, the system agent activates the downloaded content at a later time according to the scheduling message free of user intervention. New claims 23 and 24 have been added reciting the feature of the scheduling messages being initially delivered at a time when bandwidth utilization is expected to be minimal. Support for these amendments can be found at least in FIG. 4A and the surrounding discussion on page 21, line 10 through page 23, lines 21.

Neither Rosser, Khoo nor Marsh teaches or suggests these features. In particular, Marsh requires that his electronic mail server wait for a client to arbitrarily initiate a connection to the server before initiating a content download (Marsh: Fig. 5 and col. 13, lns. 55-61). Likewise, in Khoo, the customized media list that identifies programming and commercials for a user is not generated and transmitted to the user unless the server first receives personalized user data from the client. (See Khoo: Abstract). Rosser does not teach scheduling content download by delivery of scheduling messages at all. Rather, Rosser broadcasts content to all devices over a network. (See Rosser: Abstract).

For at least these reasons, it is believed that amended claims 1 and 10 are novel and nonobvious in view of the prior art of record.

By virtue of their dependency from claims 1 and 10, it is also believed that claims 5-9 and 12-24 are also patentable.

U.S. Patent 6,047,327 to Tso et al

With respect to the references cited in the Sixth Supplemental IDS filed April 6, 2004, Applicants note U.S. Patent 6,047,327 to Tso et al. During the telephonic Examiner interview on August 4, 2004, the subject matter of Tso was discussed. Tso also does not teach or suggest the present invention as now claimed.

Tso discloses a system for distributing electronic information to a targeted group of users. Referring to Fig. 5 of Tso, a server receives items of information (“InfoCasts”) from content providers. For example, an InfoCast may be a data file including a news story, video feed, or audio feed. For each InfoCast, a summary of the information (“InfoBite”) is generated including resource identifiers that point to the corresponding information stored at the server or at the originating content provider. (See Tso: Fig. 4). The InfoBites may also contain a listing of actions that may be invoked by a user (“InfoActions.”), such as downloading an InfoCast resource. (See Tso: Table 2)

For each user, the server filters the generated InfoBites based on a user profile, current location and time of day. The filtered InfoBites are then sent to the client through a Short Message Service (SMS) interface. Once the InfoBites are received, the client may, if desired, issue a server request for specific resources identified in the InfoBite that are necessary for its display (e.g., thumbnail graphics, maps, etc). (Tso: col. 13, ln. 27 through col. 14, ln. 51).

Once the InfoBite is displayed, the user can optionally instruct the client to display the full content of the InfoCast by using the corresponding resource identifier to obtain the full information from the server or content provider. Other user actions, or InfoActions, may also be invoked. (Tso: col. 14, ln. 52 through col. 15, ln. 51).

As now amended in claims 1 and 10, Tso fails to teach or suggest a system manager that schedules content download by initiating delivery of individual scheduling messages in advance of content activation to cause the targeted network devices to download and activate the content according to the scheduling messages. Rather, in Tso, the InfoBites merely serve as a means for notifying a user of available InfoCasts that can be downloaded. The InfoBite is first displayed to

the user enabling the user to optionally cause the client to request the content. The mere fact that an InfoBite is received does not automatically trigger the client to transparently download InfoCast resources. Rather, the user has the option of downloading the content or not.

Moreover, as recited in new claims 23 and 24, Tso fails to teach or suggest a system manager that schedules content download by initiating delivery of individual scheduling messages at a time when bandwidth utilization is expected to be minimal. At best, Tso mentions that InfoBites are filtered for each user based on a temporal filter. However, this temporal filter relates to the validity period of the InfoCast itself (e.g., traffic report valid for 30 minutes) and not a time when bandwidth utilization is expected to be minimal. For example, the “system manager” of the present invention can be configured to send scheduling messages during off peak hours or when the monitored network utilization falls below a predetermined level. (See specification, page 22, lines 6-11).

Furthermore, as now recited in claims 1 and 10, Tso fails to teach or suggest including data in a scheduling message that schedules activation of downloaded content at a time subsequent to content download in a manner free of user intervention. Claims 17 and 20 are also similarly amended. With respect to the InfoBites, the client handles their display upon receipt. The InfoBites do not contain data that schedules their activation at a time subsequent to their download. Furthermore, although the InfoBites contain data indicating various user actions or “InfoActions,” these actions must be manually invoked. In other words, these InfoActions do not schedule activation of downloaded content in a manner free of user intervention.

For at least these additional reasons, it is believed that amended claims 1 and 10 are novel and nonobvious in view of the prior art of record.

By virtue of their dependency from claims 1 and 10, it is also believed that claims 5-9 and 12-24 are also patentable.

Information Disclosure Statement

Applicants’ records indicate that a Fifth Supplemental Information Disclosure Statement (IDS) that was filed on August 7, 2003 in a Request for Continued Examination (RCE) has not been acknowledged by the Examiner. Specifically, it appears that the U.S. patent references cited therein were not reviewed because the Examiner did not receive paper copies of these

references. Applicants believe that the copies of these references were filed with the Amendment. Regardless, Applicants thank the Examiner for agreeing to review these references electronically irrespective of whether the paper copies of the references are located. Applicants' respectfully request entry of this IDS with a signed copy of the corresponding PTO 1449 form returned for confirmation. For convenience of the Examiner, enclosed is a copy of the PTO 1449 form as previously filed.

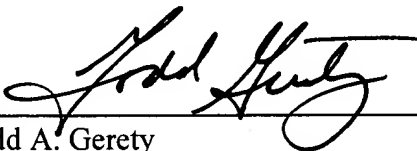
Also, a Sixth Supplemental Information Disclosure Statement (IDS) was filed along with the Applicants' prior Amendment dated April 6, 2004. It appears that this IDS was filed on the mailing date of the present office action. Applicants' respectfully request entry of this IDS with a signed copy of the corresponding PTO 1449 form returned for confirmation. For convenience of the Examiner, enclosed is a copy of the PTO 1449 form as previously filed.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims (1, 5-10, and 12-24) are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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By 

Todd A. Gerety

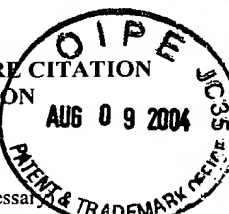
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PTO-1449 REPRODUCED		ATTORNEY DOCKET NO. 2657.2001-003		APPLICATION NO. 09/519,245	
INFORMATION DISCLOSURE CITATION IN AN APPLICATION April 5, 2004 (Use several sheets if necessary)				FIRST NAMED INVENTOR Chaitanya Kanojia	
				FILING DATE March 6, 2000	
		EXAMINER Jeffrey D. Carlson		CONFIRMATION NO. 8263	GROUP 3622

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U.S. PATENT DOCUMENTS

EXAM- INER INI- TIAL	REF. NO.	DOCUMENT NUMBER Number-Kind Code (if known)	ISSUE DATE / PUBLICATION DATE MM-DD-YYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT
	AA4	6,047,327	04-04-2000	Tso, et al.
	AB4	US 6,226,618 B1	05-01-2001	Downs, et al.
	AC4	US 6,345,256 B1	02-05-2002	Milsted, et al.
	AD			
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